

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method of operating a system including two or more search providers and a user interface, ~~having a first input region and a second input region,~~ the method comprising:

receiving information ~~regarding one or more query properties~~ from one or more of the search providers directed to query language features supported by the respective search providers;

transmitting the information received from the one or more of the search providers to the user interface, allowing the user interface to provide query input fields, wherein a certain one or more of the query input fields include the information received;

~~configuring at least a portion of the second input region of the user interface based on one or more of the received query properties;~~

receiving user input through the user interface to define a query; parsing the query to define a parse tree; passing the parse tree to at least one of the search providers;

transforming the parse tree based on the information received from a query properties of one of the search providers; and conducting a search based on the transformed parse tree.

2. (currently amended) The method of claim 1, wherein the information received from the one or more of the search providers includes any one or more of data property names, query comparison operators, ~~receiving information regarding one or more query properties comprises receiving information regarding one or more data object properties,~~ ~~one or more comparison operators,~~ and ~~one or more operands for each of the one or more comparison operators,~~ syntactic data types, data value types, or localization information about display strings.

3. (canceled)

4. (original) The method of claim 1, wherein passing the parse tree to at least one of the search providers comprises passing the parse tree by value to one of the search providers.

5. (original) The method of claim 1 further comprising electronically transferring at least a portion of the query to one or more other users.

6. (original) The method of claim 1, further comprising copying at least a portion of the query to a repository for use by other users.

7. (currently amended) A system comprising:
a graphical user interface having input fields ~~a first input region and a second input region~~ for defining a query;
two or more search providers;
means for interrogating and receiving information indicating one or more query properties from one or more of the search providers;
means for transmitting the information received to the user interface, allowing the user interface to populate a certain one or more input fields with the information received;
~~configuring at least a portion of the second input region of the user interface based on one or more of the received query properties;~~
means for receiving user input through the user interface to define a query; ~~after reconfiguring at least a portion of the second input region;~~
means for parsing the query to define a first parse tree;
means for passing the parse tree to at least one of the search providers;
means for deriving a second, parse tree based on query properties of one of the search providers; and
means for searching a database based on the second parse tree.

8. (original) The system of claim 7, wherein the means for deriving the second parse tree is within one of the two or more search providers.

9. (currently amended) The system of claim 7, wherein the means for searching a database based on the second parse tree ~~conducting a search based on the transformed parse tree~~ is within one of the two or more search providers.

10. (currently amended) A method of operating a system including two or more search providers and a user interface, the method comprising:

receiving information regarding one or more query properties from one or more of the search providers; and

transmitting the information received to the user interface, wherein the information is entered into a pre-determined one or more input fields of the user interface.

~~configuring at least a portion of the user interface based on one or more of the received query properties.~~

11. (currently amended) The method of claim 10, wherein receiving information regarding one or more query properties comprises receiving information regarding any one or more of data object properties; one or more comparison operators, or ~~and~~ one or more operands for each of the one or more comparison operators.

12. (currently amended) The method of claim 10, wherein the information entered into the one or more input fields of the user interface is displayed in query window of the user interface prior to, and to facilitate, a user's entry of query defining data into remaining, unpopulated input fields. ~~configuring at least a portion of the user interface based on one or more of the received query properties comprises defining and displaying one or more input fields for one or more of the received properties.~~

13. (currently amended) A method of operating a system including two or more search providers and a user interface, the method comprising:

receiving information regarding one or more query properties from one or more of the search providers; and

communicating a query to one or more of the search providers, using a user interface that has included the information received regarding the one or more query properties into input field defining the query communicated. ~~configured based on one or more of the received query properties, to one or more of the search providers.~~

14. (canceled)

15. (canceled)

16. (currently amended) A method of operating a system including a user interface and two or more search providers, the method comprising:

passing a parse tree representation of a query to a first one of the search providers;

passing a parse tree representation of the query from the first one of the search providers to a second one of the search providers; and

transforming the parse tree representation of the query to target the second one of the search providers, from the first one of search providers, the transformation incorporating based on query properties requested of, received from, and regarding the second one of the search providers.

17. (currently amended) A method comprising:

receiving a signal indicating invocation of a search or find command;

displaying a ~~first part of a~~ graphical user interface in response to receiving the signal;

receiving information regarding one or more query properties from one or more search providers; and

displaying the information received within a second part of the graphical user interface, whereby the information displayed facilitates a definition of one or more queries to the one or more search providers. ~~based on the received information regarding the one or more query properties.~~

18. (canceled)

19. (currently amended) An extensible search architecture for a computer system, comprising:

means for determining query properties of two or more search providers; and

means for communicating queries to the two or more search providers, using a user interface that has included the query properties determined in one or more input fields defining the queries communicated., ~~with a user interface configured based on the determined query properties of the search providers, to one or more of the search providers.~~

20. (currently amended) An extensible search architecture for a computer system, comprising:

a graphical user interface;

two or more search providers; and

an interface coupled between the two or more search providers and the graphical user interface and adapted to communicate information regarding query definition forms from one or more of the search providers to the graphical user interface providing that the graphical user interface incorporate the information into input fields provided by the graphical user interface for definition of queries to be transmitted to the two or more search providers. ~~be configured to the query definition forms communicated from one or more of the search providers.~~

21. (currently amended) A method for providing a unified user interface to two or more search providers, each adapted to search a different data store and each having one or more unique query operators or query-definition fields, the method comprising:

identifying at least the unique query operators and query-definition fields supported by each search provider by receiving information from each search provider identifying its unique query operators and query definition fields;

displaying a user interface that allows definition of a query based on one or more of the unique query operators or query-definition fields, the user interface including in query definition input fields the unique query operators and query definition fields identified; and

processing the query by passing information regarding the one or more unique query operators and query-definition fields in the query to at least one of the search providers.

22. (canceled)

23. (original) The method of claim 21, wherein displaying a user interface that allows definition of a query based on one or more of the unique query operators or query-definition fields comprises displaying the one or more unique query operators or query-definition fields.

24. (previously presented) The method of claim 21, wherein processing the query by passing information regarding the one or more unique query operators and query-definition fields in the query to at least one of the search providers comprises passing a parse tree based on the query to at least one of the search providers.

25. (currently amended) A computer readable medium having computer-executable components ~~executable instructions encoded thereon~~ comprising:

a plurality of search providers, each adapted to search at least one data store using a supported set of search operators and a supported set of search fields;

a configurable user interface having two or more interface elements which allow construction of a query using any of the set of supported search operators and search fields from any of the plurality of search providers; and

a search application program interface between the configurable user interface and the plurality of search providers, the search application program interface adapted to receive and provide information regarding the supported set of search operators and search fields for each of the search providers so that the user interface can include the information, without user entry of the information, be configured to allow access to search operators and search fields supported by any of the plurality of search providers through user entry of a single query definition in the user interface.

26. (original) The medium of claim 25, wherein one or more portions of the search providers, the user interface, or the search application program interface are implemented in accord with COM..

27. (original) The medium of claim 25, wherein one or more of the search providers are implemented in an object-oriented programming language.

28. (original) The medium of claim 25, wherein one or more of the search providers is adapted to search two or more data stores.

29. (original) The medium of claim 25, wherein the plurality of search providers includes at least three search providers.

30. (original) The medium of claim 25, wherein the plurality of search providers includes a first search provider for searching bug files, a second search provider for searching link files, and a third search provider for searching software component files.

31. (currently amended) A method of operating a graphical user interface for defining queries, the method comprising:

receiving user input defining at least a portion of a query, through a ~~table-style~~ interface window displaying input fields in grid format; and

receiving user input defining a remaining portion of the query, through a graphical interface window that receives input user input pictorially.

~~displaying a diagrammatic or keyword-style interface window based on the query.~~

32. (currently amended) A method of operating a graphical user interface for defining queries, the method comprising:

displaying a query pictorially in a form of a diagram or a table within a ~~first~~ window of the graphical user interface; and

displaying the query in a different form within the ~~a second~~ window of the graphical user interface.

33. (currently amended) A method of operating a system including two or more search providers and a user interface, the method comprising:

receiving information regarding one or more query properties from one or more of the search providers;

providing ~~at least one constant~~ input fields to receive input to define a query, wherein pre-determined input fields are populated with the information received; the constant input fields remain constant from one search provider to another regardless of the received information regarding the one or more query properties;

receiving providing at least one adaptive input field to receive input to define a query in the remaining unpopulated input fields; and wherein the adaptive input field changes from one search provider to another based upon the information regarding the one or more query properties;

~~receiving input through the constant and adaptive input fields to define a query; and communicating the query to conduct a search.~~

34. (previously presented) A method of operating a system including two or more search providers and a user interface, the method comprising:

obtaining information regarding query definition forms of one or more of the search providers;

adapting a portion of the user interface based on the information regarding query definition forms obtained;

displaying the adapted user interface to allow definition of a query;

receiving input through the user interface to define a query; and

communicating the query to conduct a search.

35. (previously presented) A search architecture, comprising:

two or more search providers; and

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a user interface, wherein information regarding query definition forms of one or more of the search providers is communicated to the user interface and a portion of the user interface is adapted to receive the query definition forms of one or more of the search providers communicated, thereby providing a common user experience when defining a query operating across two or more data classes.